

Amendments to the Claims

1. (Currently Amended) A process for making a body of a vehicle for hauling material having a front wall, a pair of sidewalls and a rear edge, the process comprising:

(a) determining heaping characteristics of material to be hauled at the vehicle's anticipated point of use, including at least angles of material repose in three dimensions, wherein the angles of material repose include front, rear and side angles;

(b) developing a three dimensional model of a load to be carried in the body on a chassis using the angles of material repose;

(c) adjusting a set of design parameters of the body until a center of gravity of the model is located proximate a desired location for a load center of gravity on the chassis and a volume of the three dimensional model is substantially similar to a desired volumetric capacity; and

(d) producing the body in accordance with the adjusted set of design parameters.

2. (Previously Presented) The process according to claim 1 wherein the set of design parameters of the body includes a position of the body floor and a position of the body sidewalls.

3. (Previously Presented) The process according to claim 2 wherein the position of the body floor includes a length of the floor.

4. (Previously Presented) The process according to claim 2 wherein the position of the body sidewalls includes a height of the sidewalls.

5. (Previously Presented) The process according to claim 4 wherein the position of the body sidewalls further includes a distance between the respective sidewalls.

6. (Previously Presented) The process according to claim 2 wherein the set of design parameters of the body further includes a position of the body front wall.

7. (Previously Presented) The process according to claim 4 further including the step of adjusting a length of the body floor and the height of the body sidewalls to provide a the

lowest practical vertical location for the center of gravity of the three dimensional volumetric model of the hauled material.

8. (Canceled)

9. (Canceled)

10. (Previously Presented) The process according to claim 1 wherein the heaping characteristics of material to be hauled at the anticipated point of use further includes a representation of an actual load.

11. (Previously Presented) The process according to claim 10 wherein the heaping characteristics of material to be hauled at the anticipated point of use includes angles of material repose and representations of corner voids present in the corners of load-carrying vehicle bodies.

12. (Previously Presented) The process according to claim 1 wherein the heaping characteristics of material to be hauled at the anticipated point of use further includes a density of the material.

13. (Previously Presented) The process according to claim 1 wherein the heaping characteristics of material to be hauled at the anticipated point of use accounts for a method used for loading material into the vehicle body.

14. (Previously Presented) The process according to claim 10 wherein developing the three dimensional model of a load to be carried in the body includes developing the three dimensional load model to account for corner voids in the vehicle body.

15. (Previously Presented) The process according to claim 14 wherein the three dimensional model is developed through a gradual incremental blending of the respective side angles of material repose to the front angle of material repose and a gradual incremental blending of the respective side angles of material repose to the rear angle of material repose.

16. (Previously Presented) The process according to claim 14 further including comparing the three dimensional load model with the representation of the actual load information and adjusting the three dimensional load model as necessary such that the three dimensional load

model substantially compares with the heaping characteristics of material to be hauled at the anticipated point of use.

17. (Previously Presented) The process according to claim 15 wherein the incremental blending of the side angles of material repose to the front and rear angles of material repose includes dividing the respective rounded corners of the three-dimensional model into equal segments, establishing a plane in each of these segments at a respective angle which allows an incremental change in the angles of material repose and extending the planes until they intersect the perimeter of the body.

18. (Previously Presented) The process according to claim 1 wherein developing the three dimensional model of a load to be carried in the body includes modeling corner voids of the hauled material into the three dimensional load model.

19. (Previously Presented) The process according to claim 1 further including adjusting the set of design parameters to provide the lowest practical vertical location for the center of gravity of the three dimensional model of the hauled material.

20. (Previously Presented) The process according to claim 1 further including adjusting the set of design parameters to allow material to be loaded into the body from the lowest practical vertical location.

21. (Previously Presented) A process for making a body of a vehicle for hauling material having a front wall, a pair of sidewalls and a rear edge, the process comprising:

(a) developing a three-dimensional model of a load to be carried in the body on a chassis, where the model incorporates angles of material repose in three dimensions for an actual load at an anticipated point of use and includes representations of the conical shape of an actual load;

(b) adjusting a set of design parameters of the body until the load model center of gravity is located proximate a desired location for a load center of gravity on a chassis of the vehicle and the volume of the three-dimensional model is substantially similar to a desired volumetric capacity of the vehicle; and

(c) producing the body in accordance with the adjusted set of design parameters.